

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

EVOLVED WIRELESS, LLC,)	
)	
Plaintiff,	)	C.A. No. 15-542-SLR-SRF
)	
v.	)	JURY TRIAL DEMANDED
)	
APPLE, INC.,)	
)	
Defendant.)	
EVOLVED WIRELESS, LLC,)	
)	
Plaintiff,	)	C.A. No. 15-543-SLR-SRF
)	
v.	)	JURY TRIAL DEMANDED
)	
HTC CORPORATION, and)	
HTC AMERICA, INC.,)	
)	
Defendants.)	
EVOLVED WIRELESS, LLC,)	
)	
Plaintiff,	)	C.A. No. 15-544-SLR-SRF
)	
v.	)	JURY TRIAL DEMANDED
)	
LENOVO GROUP LTD., LENOVO (UNITED)	
STATES) INC., and MOTOROLA MOBILITY)	
LLC,)	
)	
Defendants.)	
EVOLVED WIRELESS, LLC,)	
)	
Plaintiff,	)	C.A. No. 15-545-SLR-SRF
)	
v.	)	JURY TRIAL DEMANDED
)	
SAMSUNG ELECTRONICS CO., LTD. and)	
SAMSUNG ELECTRONICS AMERICA, INC.,)	
)	
Defendants.)	

EVOLVED WIRELESS, LLC,)	
)	
Plaintiff,	)	C.A. No. 15-546-SLR-SRF
)	
v.	)	JURY TRIAL DEMANDED
ZTE (USA) INC.,)	
)	
Defendant.)	
EVOLVED WIRELESS, LLC,)	
)	
Plaintiff,	)	C.A. No. 15-547-SLR-SRF
)	
v.	)	JURY TRIAL DEMANDED
)	
MICROSOFT CORPORATION, MICROSOFT)	
MOBILE OY and NOKIA INC.,)	
)	
Defendants.)	

DEFENDANTS' CLAIM CONSTRUCTION SURREPLY

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Defendants respectfully submit this Claim Construction Surreply in response to Evolved Wireless's ("Evolved") Reply Claim Construction Brief (D.I. 85).¹

I. MEANS-PLUS-FUNCTION LIMITATIONS

A. Statements in IPR Petitions Based on the Broadest Reasonable Interpretation Standard Do Not Conflict With Defendants' Constructions of the Disputed Means-Plus-Function Terms Here Under *Phillips*

Rather than focus on Defendants' arguments, Evolved devotes much of its reply brief to an argument that experts' statements in connection with Defendants' *Inter Partes* Review ("IPR") petitions constitute admissions favoring Evolved's proposed constructions of the disputed means-plus-function terms. (*See* D.I. 85 at 1-7.) But Evolved's argument is nothing more than a red herring, ignoring entirely the differing claim construction standards in district court and IPR proceedings.

As the Supreme Court recently affirmed, patent claims that are challenged in IPR proceedings are construed according to an entirely different, *broad*er standard—the broadest reasonable interpretation ("BRI") standard—than is applied in district court litigation—"ordinary meaning . . . as understood by a person of skill in the art." *See Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144-2145 (2016) (upholding application of the BRI standard as a lawful exercise of the Patent Office's statutorily granted rulemaking authority). In support of Defendants' IPR petitions, their experts did precisely what the Supreme Court ruled is proper—they applied broad interpretations of the claims under the BRI standard to assess whether the patents-in-suit unlawfully claim that which is in the prior art. These experts' statements are not germane to the proper construction of the claims under *Phillips*.

¹ Docket entry citations herein refer to the docket for C.A. No. 15-cv-542-SLR-SRF.

That Defendants in their IPR petitions argued for a broader construction of the disputed terms under a broader claim construction standard is in no way inconsistent with Defendants' proposed constructions here. Evolved's contrary argument seeks to turn *Cuozzo* on its head, upending the protections that the BRI standard's application affords. Indeed, if arguments made in IPR proceedings under the BRI standard were deemed admissions regarding the proper scope of the claim terms at issue in co-pending litigation, the BRI standard would effectively be eviscerated. Evolved provides no support for such a result. Accordingly, statements made in Defendants' IPR petitions do not constitute adverse admissions regarding claim construction here.

Moreover, to the extent Evolved argues that Defendants' IPR petitions have undermined their indefiniteness challenges here, that position is equally flawed. Unlike this Court, the PTAB is not authorized to entertain section 112 validity challenges, so Defendants must restrict those arguments to the proceedings here. Arguing in the alternative to the PTAB, Defendants merely proffered Evolved's proposed constructions as the broadest reasonable interpretation that could be applied in an IPR proceeding. Such alternative arguments do not constitute admissions that Evolved's interpretations are proper under *Phillips*.

B. “transmission unit” / “transmission unit” / “transmission module” / “access module”

Other than the bald assertion of its expert, Dr. Cooklev, Evolved has not provided any evidence that the terms “transmitting unit,” “transmission module,” “transmission unit,” or “access module” have a sufficiently definite meaning as the name for structure. Dr. Cooklev provides dictionary definitions for the words “unit” and “module,” but does not provide any dictionary definitions for “transmitting unit,” “transmission module,” “transmission unit,” or “access module,” or even a single example of where these terms have been used in the art.

(See D.I. 66 at ¶¶ 31-33, 37-39, 43-45, 50-52.) Nor does Evolved cite to any intrinsic evidence that provides any meaning of the terms' structures; indeed, the intrinsic evidence does nothing more than describe these terms' functions.

Without any intrinsic or extrinsic evidence to support its position, Evolved resorts to arguing that the terms “transmitting unit,” “transmission module,” “transmission unit,” and “access module” would be understood by a person of ordinary skill to refer to “transmitters,” and thus connote structure. But even a casual review of the claims, specifications, and figures disproves Evolved's position.

For example, claim 8 of the '481 patent specifically recites both “transmitter” and “transmission unit,” and makes clear that they are not synonymous:

A **transmitter** for transmitting a preamble sequence in a mobile communication system, **the transmitter comprising:**

a preamble generation unit . . .;

a transmission unit configured to transmit, on a random access channel, said preamble sequence to a receiving side.

To paraphrase the Federal Circuit, such recital of different terms in a single claim “does clearly imply . . . that whatever [‘transmission unit’] means, it is not a synonym for [‘transmitter’].”

See Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp., 93 F.3d 1572, 1579 (Fed. Cir. 1996)

(“If the terms ‘pusher assembly’ and ‘pusher bar’ described a single element, one would expect the claim to consistently refer to this element as *either* a ‘pusher bar’ or a ‘pusher assembly,’ but not both . . .”). Claim 8 provides that a “transmission unit” is just one component of the claimed “transmitter.” By interpreting, as Evolved does, a “transmission unit” to be a “transmitter,” however, Evolved would require a “transmitter” to be a component of the claimed “transmitter,” which is nonsensical.

Similarly, claim 6 of the '916 patent is also directed to “[a]n apparatus for transmitting a code sequence,” of which a “transmitting unit” is just a single component. Neither claim 6 nor the specification of the '916 patent, however, identify any particular portion (i.e. the particular structure) of an “apparatus for transmitting” or “transmitter” that would constitute a “transmitting unit.” (*See* D.I. 73 at 11-12.) Likewise, claim 8 of the '965 patent is directed to “[a]n apparatus for transmitting a signal,” of which “an access module” is merely one component. And neither the claims nor the specification of the '965 patent specify any particular portion of the claimed “apparatus for transmitting” that would constitute “an access module.” (*Id.* at 13.) The same holds true for the term “transmission module” in the '236 patent. The '236 patent merely discloses that the “transmission module” is a subcomponent of a “user equipment,” but nowhere does the patent identify any particular structure of a “transmission module” or equate it to a “transmitter.” (*Id.* at 15.)

C. “code sequence generator” / “preamble generation unit”

Unable to identify any intrinsic evidence that links to the required function any specific algorithm or structure for generating code sequences or preambles, Evolved would construe (i) a “code sequence generator” as hardware or software that does *not* produce the “generated code sequences” of the purported '916 invention, and (ii) a “preamble generation unit” as hardware or software that does *not* create the “preambles” of the purported '481 invention. In so doing, Evolved ignores the intrinsic evidence pertaining to “generating” code sequences and preambles, and would improperly limit the claimed functions to merely “adjust[ing]” or “modif[y]ing” the “generated code sequences” or “preambles.”

The '916 specification makes clear that the function of “generating a code sequence” is not linked to any particular algorithm or structure as § 112(6) requires. (*See* '916 patent at 5:62-6:2 (“code sequence(s) . . . can be generated based on the code generation algorithm

based on code type . . . Here, the code types include Hadamard code, Pseudo Noise (PN) code, and a Constant Amplitude Zero Auto-Correlation (CAZAC) code, *among others* . . .”); *see also* D.I. 73 at 10-11.) In an attempt to side-step this indefiniteness problem, Evolved argues that the claimed “code sequence generator” does not generate a code sequence, but instead merely performs a “cyclic extension” and a “circular shift” as claim 8’s “wherein” clauses describe. (D.I. 85 at 11-12.) But Figure 13 and the corresponding specification on which Evolved relies as purported support for the claimed “code sequence generator” are clear that Figure 13 depicts performing certain operations on a “generated code sequence.” (*See, e.g.,* ’916 patent at 12:37-39 (“FIG. 13 is an exemplary diagram illustrating application of circular shift to the generated code sequence after a padding portion is attached.”).) Evolved dismisses that “generated code sequence” as a mere “input” to the claimed “code sequence generator,” but it is nonsensical to interpret the claimed apparatus as creating a “generated code sequence” by way of something other than a “code sequence generator.” Furthermore, the ’916 patent plainly states that Figure 13 merely illustrates how “the generated code sequence is adjusted/modified.” (*Id.* at 13:15-17.) Thus, Evolved would nonsensically construe claim 8 to pertain to a “code sequence generator” that “adjust[s]” and “modif[ies]”—but does not “generate”—a “generated code sequence.”

Similarly, the ’481 patent is clear—and Evolved does not dispute—that the function of generating a preamble is described in subjective terms, and thus is not linked to any particular algorithm or structure as § 112(6) requires. (*See* ’481 patent at 12:23-28 (“**Every sequence having excellent transmission characteristic**, such as Hadarmad code and gold code, can be used as the code sequence.”); *see also* D.I. 73 at 17-18.) Evolved argues instead that subjective description merely pertains to “inputs” to the claimed “preamble generation unit.” But Figure

11 and the accompanying specification on which Evolved relies for the claimed “preamble generation unit” explain that the operations described therein are performed on “preambles.” (See, e.g., ’481 patent at 11:60-64 (Fig. 11 is a diagram that “*consists of two repetitive preambles*” wherein “a part of the *preamble* of the later order is copied in the first part of the CP [cyclic prefix]”).) And Evolved offers no explanation of how such “preambles” are generated if the claimed “preamble generation unit” does not create them.

D. “sequence selecting module”

Arguing that “the claim itself specifies the operation of the sequence selection module,” Evolved implies that the ’965 specification is not required to disclose a structure for the “sequence selecting module” that is linked to the required function recited by the claim. (D.I. 85 at 12.) But that is not the law. See 35 U.S.C. § 112; *Noah Sys. v. Intuit Inc.*, 675 F.3d 1302, 1318 (Fed. Cir. 2012) (means-plus-function claiming requires the patentee to “describe in the patent specification some structure which performs the specified function”).²

Evolved cannot dispute that the ’965 patent’s only disclosure of a “sequence selecting module” is a “black box” depiction that is nowhere described as performing the agreed function of “acquiring information about predetermined two or more random access preamble sequence sets, selecting one random access preamble sequence set from among the

² In this regard, Evolved misapplies *Williamson* by conflating the “function” of each disputed term with its purported “structure.” (D.I. 85 at 7-10.) Section 112(6) applies if a term recites “function without reciting sufficient structure for performing that function.” *Williamson*, 792 F.3d at 1349. But Evolved points to the same language as being both a “function” and its associated “sufficient structure.” (D.I. 65 at 9-15; D.I. 85 at 9.) This is circular reasoning. Under Evolved’s logic, functional claiming in software patents would never be subject to § 112(6) because the recited “function” would always serve as its own “structure.” Even under *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1299 (Fed. Cir. 2014)—which applied a stricter, superseded test—the “structure” must be “more than just its function.”

predetermined random access preamble sequence sets considering at least one of a size of information to be transmitted by the apparatus and a degree of path loss, and randomly selecting a specific sequence within the selected random access sequence set.” (*See* ’965 patent at Fig. 16, 19:4-37.) In fact, the description of Figure 16 specifically describes that the depicted “sequence selecting module” does *not* perform the agreed function—it does *not* “randomly select[] a specific sequence.” (*Id.* at 19:26-30.) Instead, the sequence selecting module of Figure 16 “selects a suitable sequence sequence_i by considering other informations including CQI to be delivered to a base station via a RACH or the ranging channel.” (*Id.*)

Evolved affirmatively points to Figures 13 and 15 for support, but its reliance on these figures is misplaced. The description of Figure 13 explains that the figure is expressly directed to making certain selections based on the “cause” of the user equipment accessing a network (i.e., “hand-off,” “power-up,” “resource request,” or “synchronization”), not to “selecting one random access preamble sequence set” based on “at least one of a size of information and a degree of path loss.” (*See* ’965 patent at 15:40-58.) And for Figure 15, the specification makes clear that it pertains to “user equipment [that] selects a sequence set in accordance with its location within a cell,” which is not the required function. (*See* ’965 patent at 17:46-51.)

E. “multiplexing and assembly entity”

Evolved argues that “multiplexing and assembly entity” connotes structure because technical dictionaries define the individual terms “multiplexer” and “assembly.” These definitions, however, belie Evolved’s claim. For example, Dr. Cooklev points to a definition of “multiplexer” as a “device for combining two or more signals” and a definition of “assembly” as “[a] number of basic parts or subassemblies, or any combination thereof, joined together to perform a specific function.” (D.I. 66, App. 2 at 55, App. 3 at 1309.) These definitions, however, do not relate to the claimed function for “multiplexing and assembly

entity”—“transmitting new data.” (D.I. 74 ¶¶ 180-81.) Multiplexing data and assembling packets is not “transmitting new data.” (*Id.*) Given that the commonly understood meanings of “multiplexer” and “assembly” are divorced from the claimed function, it cannot be the case that placing the words “multiplexing and assembly” before “entity” connotes particular structure as the term is used in claim 7. Rather, consistent with Evolved’s proposed construction, a “multiplexing and assembly entity” in claim 7 is merely a placeholder for generic hardware and/or software; in other words, a substitute for “means.” *See Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1350 (Fed. Cir. 2015). Evolved also relies on a reference to “multiplexing and assembly entity” in an early version of a portion of the LTE standard. (D.I. 66, App. 4 at 14-15.) But the version of the standard on which Evolved relies does not provide any information about the structure of the “multiplexing and assembly entity”; instead, it merely describes its function, which is consistent with the purpose of the standard, to define a communications protocol, not define structure. (*Id.*; D.I. 74 ¶ 182.)

F. “Hybrid Automatic Repeat Request (HARQ) entity”

Evolved relies primarily on Figure 9 as disclosing the algorithm that performs the claimed functions of the “HARQ entity.” Figure 9, however, is nothing more than a high-level depiction of *some* of the claimed functions. (’236 patent, Fig. 9; D.I. 74 ¶ 157.) While Evolved is correct that a flowchart is an acceptable means by which a patentee may disclose structure, that flowchart must disclose “a *sufficient* algorithm describing how a general-purpose computer will perform the [claimed] function.” *HTC Corp v. IPCom GmbH & Co.*, 667 F.3d 1270, 1279-80 (Fed. Cir. 2012) (emphasis added). Figure 9 falls far short of that. There is nothing in Figure 9 or the associated description as to how the HARQ entity performs the claimed functions. (’236 patent at 13:35-14:17, Fig. 9; D.I. 74 ¶ 157.) And one of the claimed functions—“controlling the transmission module to transmit the data stored in the

Msg3 buffer to the base station using the UL Grant signal received by the reception module on the specific message”—is not depicted at all in Figure 9, (’236 patent at 13:35-14:17, Fig. 9; D.I. 74 ¶ 157.), so that figure cannot be the disclosed corresponding structure. Other than Evolved’s conclusory statement that Figure 9 is “sufficient,” Evolved’s reply brief provides no evidence to the contrary. (D.I. 85 at 14.)

G. “radio protocol”

Similar to its argument for HARQ entity, Evolved suggests that there is sufficient structure for “radio protocol” simply because Figure 9 of the ’373 patent depicts the claimed functions. But as explained above, the disclosure must include a “sufficient algorithm” describing *how* the claimed functions are performed. *HTC Corp.*, 667 F.3d at 1279-80. Figure 9 and its associated text do not disclose how the claimed functions are performed; rather, they are mere restatements of *some* of the claimed functions. (’373 patent at 7:8-29, Fig. 9; D.I. 74 ¶¶ 106-08; D.I. 73 at 14.) Evolved also points to a disclosure of a “Radio Interface Protocol” in the “Background Art” section of the ’373 patent. (D.I. 85 at 13 (citing ’373 patent at 1:46-2:39, 3:54-4:43.)) But given that the entirety of claim 24 is the claimed “radio protocol,” it cannot be the case that the description of the *prior art* to the ’373 patent is the description of how the functions of the claimed “radio protocol” are performed. At a minimum, a radio protocol described as being in the prior art is not clearly linked to a radio protocol claimed to be a novel advance over the prior art.

II. TERMS INDEFINITE UNDER *IPXL* AND *REMBRANDT*

A. The Court Should Not Read “Capability” Into the Hybrid Claims

As Defendants explained in detail in their answering brief, the plain language of each disputed term requires that a method step be performed for infringement to occur. (D.I. 73 at 19-23; D.I. 74 ¶¶ 209-11, 213-16, 218-19.) For example, according to Dr. Valenti, a person of

ordinary of skill in the art, when viewing claim 1 side-by-side with claim 8 of the '965 patent, the two disputed limitations look the same. (D.I. 79 ¶ 210.) Thus, a person of ordinary skill in the art would read claim 8 as requiring the apparatus to “actually be performing the steps . . . rather than merely being capable of performing the method steps.” (*Id.* ¶ 211.)

Evolved asks the Court to simply ignore this plain language, however, and instead to construe these hybrid terms to include “capability” language where no such language exists. Tellingly, Evolved does not point to any intrinsic or extrinsic evidence to support its redrafting of the claims. (D.I. 85 at 18.)

Evolved relies on *UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816 (Fed. Cir. 2016), as supporting its redrafting of the claims. But the claims-at-issue in *UltimatePointer* focused solely on the output (image data) of a component (an image sensor) of the claimed apparatus and the use of that output by another component (a processor). 816 F.3d at 819. Claim 8 of the '965 patent, in contrast, recites various steps (acquiring, selecting, accessing) that two entirely different structures must perform. Significantly, these steps that the different structures must perform in claim 8 are nearly identical to those in method claim 1.

And with respect to the '236 patent, Evolved ignores entirely that, unlike in the cases it cites, when the patentee intended to draft claim limitations in the '236 patent directed to the capability of the apparatus, it did so by using the language “adapted” and the infinitive form of the verb describing what the apparatus must be capable of doing. ('236 Patent, claim 7.) The patentee then switched to a different verb form—in the disputed limitations of the '236 patent—when indicating method steps that must be performed. ('236 patent, claims 7-10, 12, 13; *see also* D.I. 73 at 21-22; D.I. 74 ¶ 215.) In addition, Evolved ignores that certain of the disputed limitations of the '236 patent include the word “when,” introducing a clear temporal

aspect into the claims that was not present in the claim-at-issue in *UltimatePointer*. (See D.I. 74 ¶ 215.) Evolved argues that these claims (and claim 24 of the '373 patent) should somehow be treated differently because they purportedly disclose an “algorithm,” but Evolved provides no support for its position. (D.I. 85 at 19-20.)

Evolved also argues that *HTC Corp.*, 667 F.3d at 1274, supports its position that claims 24 and 25 of the '373 patent are definite. *HTC Corp.*, however, is inapplicable. The court in *HTC Corp.* considered the propriety of a claim drafted in what the court called a “preamble-within-a-preamble” format, and held that the format does not preclude the claim from being definite. *Id.* at 1277-78. Claims 24 and 25 of the '373 patent are not drafted in that format. Moreover, the court held that functional language found in the preamble applied to the network in which the claimed apparatus mobile station operated. *Id.* at 1273, 1277. In other words, the functional language “merely established those functions as the underlying network environment in which the mobile station operates.” *Id.* at 1277. But unlike in *HTC Corp.*, the preamble to claims 24 and 25 does not set forth any environment in which the claimed “mobile terminal” operates, nor does Evolved argue it does. Instead, the requirement in the claims that the referenced target base station performs the step of determining the dedicated preamble is in the body of the claims, not the preamble. ('373 patent, claims 24, 25.) Thus, Evolved has not provided any precedent that explains or supports *why* “capability” should be read into the disputed terms.³

³ The method steps recited in the disputed terms are not the type of “functional” language courts have traditionally determined allowable. See e.g. *Oakley, Inc. v. Sunglass Hut Int'l*, 316 F.3d 1331, 1341 (Fed. Cir. 2003) (finding “vivid colored appearance” definite due to the examples and calculations defined in the specification); *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1363 (Fed. Cir. 1999) (interpreting the term “permanently affixed” with its plain and

Accordingly, for the reasons set forth in Defendants’ answering brief and herein, the disputed terms are all indefinite under §112 ¶ 2. (D.I. 73 at 19-23.)

III. CONSTRUCTION OF REMAINING TERMS

A. “handover”

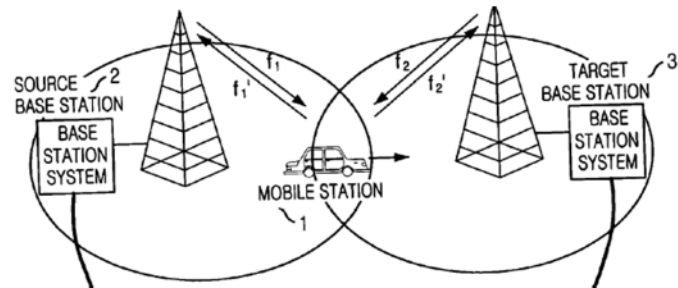
Evolved attempts to limit the term “handover” to “hard” handovers only, but “absent some language in the specification or prosecution history suggesting that [this limitation] is important, essential, necessary, or the ‘present invention,’ there is no basis to narrow [its] plain and ordinary meaning.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1373 (Fed. Cir. 2014). Evolved does not dispute that the plain meaning of “handover” encompasses both “hard” and “soft” handovers.⁴ Yet courts deviate from this standard only if the patentee acts as its own lexicographer or the patentee disclaims the full scope of the term. *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Both of these standards are “exacting,” *id.* at 1366, and Evolved has failed to demonstrate either.

Figures 1 and 6 do not constitute “clear and unmistakable disclaimer” of soft handovers. *See 3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1325 (Fed. Cir. 2013) (rejecting construction that excluded one of two figures where there was no “written description reference that affirmatively requires narrowing the construction to include only” one figure). Evolved infers from two jagged lines—that are not discussed in the

ordinary meaning to be “unremovable.”); *but cf Haliburton Energy Servs. v. M-I LLC*, 514 F.3d 1244, 1255-1256 (Fed. Cir. 2008) (finding the term “fragile gel” was *indefinite* because the functional language was “ambiguous as to the requisite degree of fragileness of the gel or the ability of the gel to suspend drill cuttings.”)

⁴ Indeed, the prior art on which Evolved relies discloses both “soft” and “hard” handovers. *See, e.g., Choi*, D.I. 61-4 at [0006] (“There are three types of conventional handoffs, . . . [including] the hard handoff, soft handoff, and softer handoff.”); *Samuel*, D.I. 61-3 at [0006] (hard), [0031] (soft).

specification—that Fig. 1 represents a “soft” handover. (D.I. 85 at 23). But an equally reasonable interpretation is that each connection is shown in series to represent time as the mobile terminal moves from one base station to the next as it performs a “hard” handover. For example, Fig. 1 in the Il-Gyu reference (US 2004/0053614), cited during prosecution (JA-1529), depicts a mobile terminal with what Evolved describes as “simultaneous connections.” Yet, Il-Gyu



Il-Gyu, Ex. 6 at Fig. 1

describes this Fig. 1 as “an example of the *hard handover* between a source base station 2 and a target base station 3.” Stiernberg Decl., Ex. 6 at [0006] (emphasis added). Because Figures 1 and 6 of the '373 patent are “amenable to multiple reasonable interpretations,” they cannot constitute a clear and unambiguous disclaimer. *3M*, 725 F.3d at 1326.

Figure 9—which is described as an “exemplary embodiment”—also does not constitute clear and unmistakable disclaimer of “soft” handovers. The Federal Circuit has repeatedly rejected the type of narrow construction that Evolved seeks. *See, e.g., HBAC Matchmaker Media, Inc. v. Google Inc.*, No. 2015-1447, 2016 WL 3059238, at *3 (Fed. Cir. May 31, 2016); *GE Lighting Sols., LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309–10 (Fed. Cir. 2014). Fig. 1 in Choi (D.I. 61-3) does not alter this result. Unlike Choi, there is no “Handoff Commenced” message in Fig. 9 and there is no reference to the status of the “radio connection with the source base station,” as used in Evolved’s construction. *See 3M*, 725 F.3d at 1325.

B. “target base station” ('373 patent, claims 1, 3, 8, 15, 18, 20, 23-25)

Evolved’s Reply Brief largely ignores its improper attempt to import a limitation (“the source base station determines”) from the “exemplary embodiment” in Fig. 9 into the claims.

Evolved argues that “the specification uses ‘target base station’ in only one manner.” (D.I. 85 at 27.) However, the specification itself states that “[t]he scope of the claims is intended to cover various modifications and equivalent arrangement of the illustrative embodiments disclosed in the specification.” ’373 patent at 9:52-55. Further, “[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (quotations omitted). Evolved’s attempt to distinguish *Liebel-Flarsheim* is misplaced, as even Evolved admits that the basis for its additional limitation derives from Fig. 9 (D.I. 60 at 19-22), which is described as “an *exemplary* diagram . . . according to an *exemplary* embodiment of the present invention.” ’373 patent at 6:6-8.

Evolved’s proposed construction also improperly excludes the possibility that the mobile terminal—as opposed to the source base station—determines the target base station. In fact, it is clear that the patentee intended the opposite. For example, the specification states unambiguously that “the *present invention* is also applicable to . . . Mobile Wi-Max,” ’373 patent at 9:20-24 (emphasis added), and even Evolved admits that “[i]n Wi-Max . . . the mobile phone chooses the target base station” (D.I. 85 at 28). See *Honeywell Int’l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006) (discussing the import of a written description of “the present invention”).⁵ The passage of Choi on which Evolved relies also demonstrates that

⁵ Although careful not to state so explicitly, Evolved seeks to limit the asserted claims to only LTE, which it contends (and Defendants contest) is synonymous with “E-UMTS.” (D.I. 85 at 29.) But under the doctrine of claim differentiation, both “target base station” and “handover” should be construed to cover wireless technologies beyond “E-UMTS,” which appears only in dependent claim 25. See *Intendis GMBH v. Glenmark Pharm. Ltd.*, 117 F. Supp. 3d 549, 567 (D. Del. 2015), *aff’d* 822 F.3d 1355 (Fed. Cir. 2016).

the mobile terminal may determine the target base station and report that decision to the source base station. *See* D.I. 61-4 at [0015].

Defendants’ proposed construction does not, as Evolved contends, require that the target base station “consist of multiple base stations”, nor is it “directed to ‘neighbor base stations’”—a phrase that does not appear anywhere in the specification. (D.I. 85 at 26-27.) Rather, Defendants’ proposed construction merely reflects how a handover is described in the specification. *See, e.g.*, ’373 patent at 6:21-23 (“the source eNB (12) *may* determine whether to perform a handover for the UE (10) from a current cell to the other cell.”) (emphasis added). The occurrence of a successful handover is not a foregone conclusion. For example, claim 4 recites “determining *whether* to perform a handover” to a target base station.

C. “the measurement report is used to determine” (’373 patent, cl. 17)

Evolved again attempts to import the limitation “by the source base station” into claim 17 from the exemplary embodiment depicted in Fig. 9. This is improper under well-settled Federal Circuit law. *See Liebel-Flarsheim*, 358 F.3d at 913; *Hill-Rom*, 755 F.3d at 1372–73. Further, there is nothing inconsistent with the mobile terminal “transmitting a measurement report to the source base station” in claim 16, and the mobile terminal also using “the measurement report . . . to determine whether to perform a handover” in claim 17. For example, in the Son reference (US 2005/0059437), cited during prosecution (JA-1320), the mobile terminal determines whether to perform a handover using a measurement report and then transmits that report (in the “MOB_MSSHO_REQ” message) simultaneously with its decision to the source base station. Stiernberg Decl., Ex. 7 at [0113]-[0114].

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Dated: September 30, 2016
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